AMENDMENTS TO THE CLAIMS

1. (Currently amended) Abrasive particles of composition selected from the group consisting of fused or sintered corundums, zirconium corundums, silicon carbides and boron carbide~~, other abrasives~~, and mixtures thereof;

the abrasive particles having a sheathing comprising an aqueous binding agent and a fine grained complex oxide, wherein the complex oxide comprises $A_xB_yO_z$ where A and B are different elements and x and y are greater than zero, and z corresponding to a product of the sum of (x+y) multiplied by a factor between 1.5 and 2.5;

the sheath coatings of the particles affording enhanced surface area to the underlying substrate particles and being thermodynamically stable and highly adherent, thus effecting enhanced abrasion performance of the particles;

wherein said aqueous binding agent comprises a silicate.

2. (Cancelled)

3. (Previously presented) The abrasive particles of claim 1, wherein said silicate comprises colloidal silicic acid.

4. (Previously presented) The abrasive particles of claim 1, wherein element A is a metal as characterized in the periodic system of elements.

5. (Previously presented) The abrasive particles of claim 4, wherein the complex oxide contains at least one element from the group of metals in the periodic system of elements.

6. (Previously presented) The abrasive particles of claim 5, wherein the elements from the group of metals are selected from the group consisting of titanium, zirconium, iron, cobalt, nickel, and combinations thereof.

7. (Previously presented) The abrasive particles of claim 1, wherein element B is selected from the group consisting of amphoteric elements in the periodic system of elements.

8. (Previously presented) The abrasive particles of claim 1, wherein the complex oxide contains at least one element selected from the group consisting of amphoteric elements in the periodic system of elements.

9. (Previously presented) The abrasive particles of claim 8, wherein the amphoteric elements are selected from the group consisting of vanadium, chromium, manganese, zinc, tin, antimony, and combinations thereof.

10. (Previously presented) The abrasive particles of claim 1, wherein the sheathing contains 0.05 – 5.0 weight % of the complex oxide relative to the mass of the untreated particles.

11. (Previously presented) The abrasive particles of claim 10, wherein the sheathing contains 0.1 – 2.0 weight % of the complex oxide compound relative to the mass of the untreated particles.

12. (Previously presented) The abrasive particles of claim 10, wherein the sheathing contains a binding agent portion of 0.05 – 2.0 weight % relative to the mass of the untreated particles.

13. (Previously presented) The abrasive particles of claim 12, wherein the binding agent amounts to 0.1 – 1.0 weight % relative to the mass of the untreated particles.

14. (Previously presented) A method for the treatment of abrasive particles comprising the steps of

    i. wetting the abrasive particles in a mixer with a liquid silicate binding agent;

    ii. admixing the wetted abrasive particles with a fine grained complex oxide comprising $A_xB_yO_z$, until the complex oxide is substantially evenly distributed over the surface of the abrasive particles to form sheaths

thereon, wherein A and B are different elements, x and y are greater than zero, and z corresponds to a product of the sum of (x+y) multiplied by a factor between 1.5 and 2.5; and

iii. heating the sheated abrasive particles to enhance adhesion of the sheathing.

15. (Previously presented) The method of claim 14, wherein the mixing periods in steps i) and ii) each amount to 0.5 and 5 minutes.

16. (Previously presented) The method of claim 14, wherein the heating is carried out at temperatures between 100 and 900°C.

17. (Previously presented) Synthetic, resin-bound, abrasive products comprising the abrasive particles of claim 1.